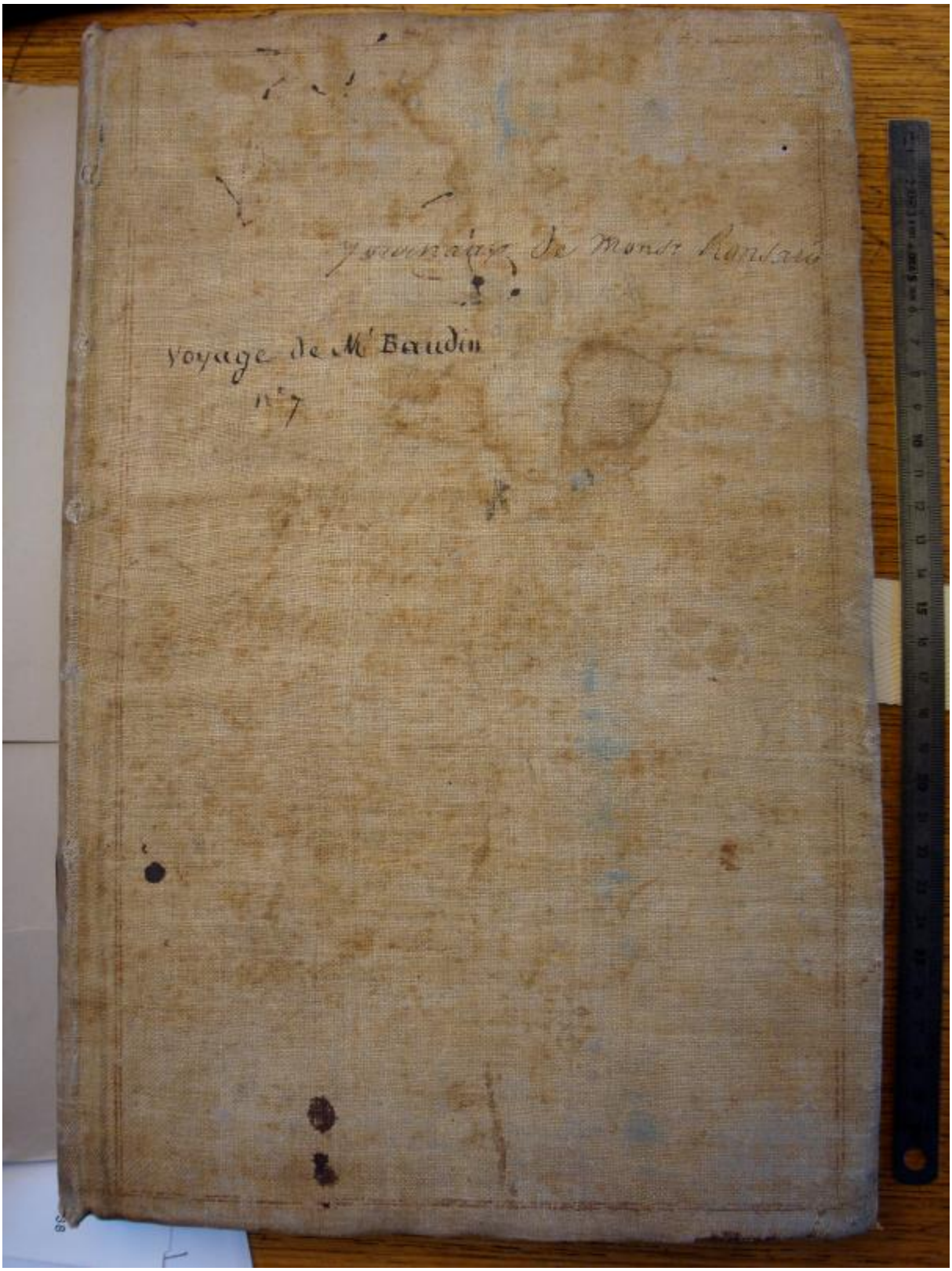
Journal of François-Michel Ronsard


Journaux de Mons Rondeau
Voyage de M' Baudin
N°7

Journal of François-Michel Ronsard
Archives nationales de France, série Marine, 5JJ28

Physical Description

Cover : linen, bearing the annotations “Journals of Monsieur Ronsard”, “Voyage of Monsieur Baudin” and “N° 7”

Dimensions : 20 x 32 cm

Contents : 78 pages of text followed by 149 blank sheets

Period covered

27 Vendémiaire Year IX [19 October 1800] – 4th Complementary Day Year IX [21 September 1801]

Notes on the text

Continuous text, no tables

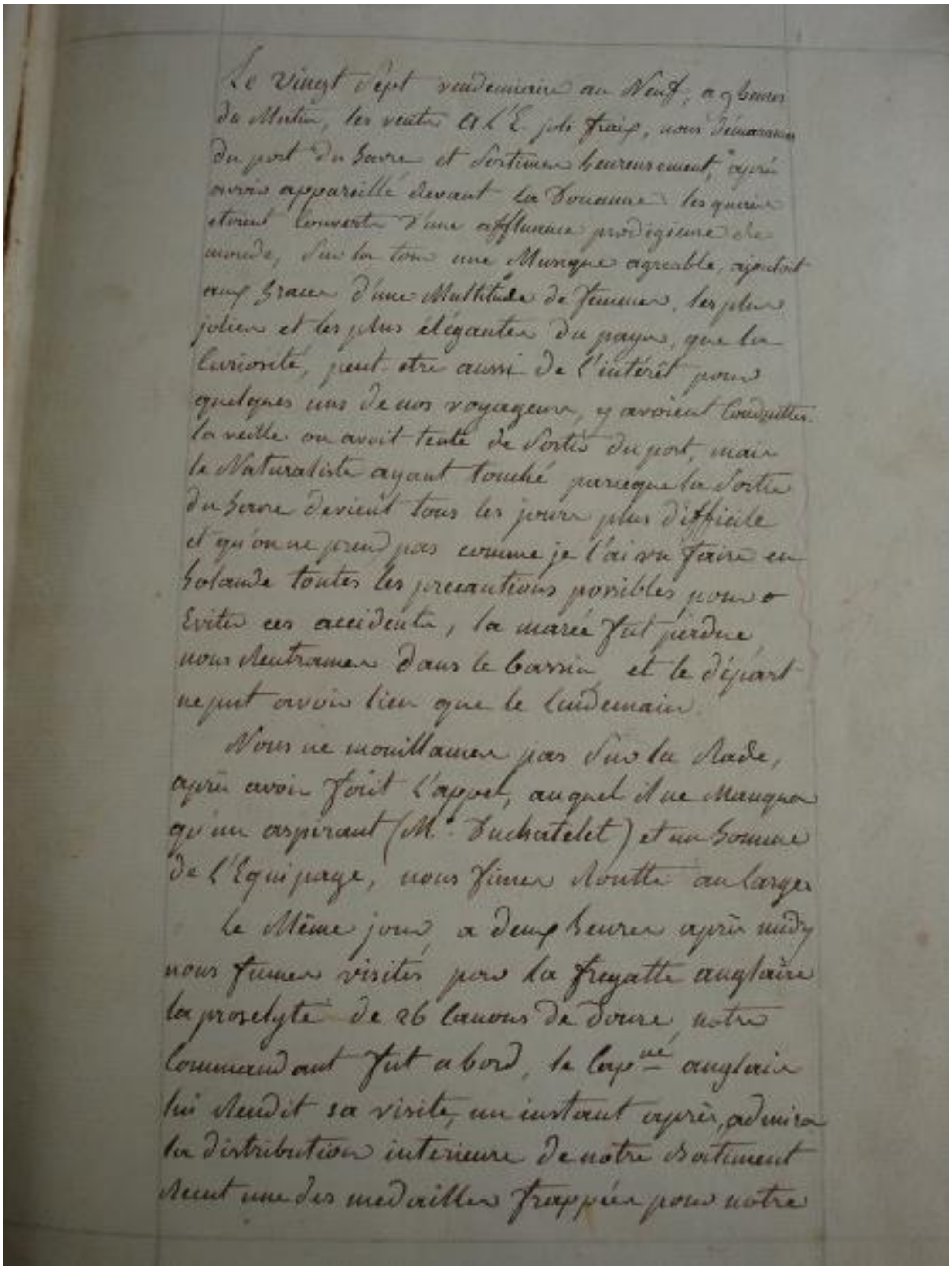
Translation

Malcolm Leader

Validation

This translation has not yet been systematically checked against the original French text. Anyone wishing to verify the accuracy of a particular passage of this English translation is invited to contact the Baudin Legacy team (see the web site for contact details).

Sample page of the manuscript


Le vingt sept vendemiaire an Neuf, a 9 heures
du Matin, les vents a l'E. joli frais, nous Démarâmes
du port du havre et Sortimes heureusement, après
avoir appareillé devant la Douanne, les quais
étoient couverts d'une affluence prodigieuse de
monde, Sur la tour une Musique agreable, ajoutoit
aux graces d'une Multitude de femmes, les plus
jolies et les plus élegantes du pays, que la
Curiosité, peut être aussi de l'intérêt pour
quelques uns de nos voyageurs, y avoient Conduittes.
la veille on avoit tenté de Sortir du port, mais
le Naturaliste ayant touché parceque la Sortie
du havre devient tous les jours plus difficile
et qu'on ne prend pas comme je l'ai vu faire en
holande toutes les précautions possibles pour
Eviter ces accidents, la marée fut perdue
nous Rentrames dans le bassin et le départ
ne put avoir lieu que le lendemain.

Nous ne mouillames pas Sur la Rade,
après avoir fait l'appel, auquel il ne Manqua
qu'un aspirant (M. Duchatelet) et un homme
de l'Equipage, nous fimes Routte au large

le Même jour a deux heures après midy
nous fumes visités par la fregatte anglaise
la proselyte de 26 canons de douze, notre
Commandant fut abord, le Capne anglais
lui Rendit sa visite, un instant après, admira
la distribution interieure de notre Batiment
Reçut une des medailles frappées pour notre

[Cover]

Journal of Monsieur Ronsard
Voyage of Monsieur Baudin

N° 7

(1)[1] At 9h00 in the morning of 27 Vendémiaire, Year Nine [19 October 1800], with the help of a fresh easterly breeze, we got under way in front of the Customs House and successfully cleared the port of Le Havre. The wharves were crowded with a vast throng of people and a band played pleasant music on the tower, adding to the charms of a host of women - the prettiest and most elegant in the area – drawn by curiosity and perhaps also by a particular interest in some of our travelling companions. We had attempted to leave port the day before, but the *Naturaliste* had touched bottom due to the fact that the passage out of Le Havre is becoming increasingly difficult, and precautions such as I have seen in Holland are not taken to avoid this sort of accident. So the tide had been lost and we returned to the harbour, unable to leave until the next day.

We did not drop anchor in the roads, but rather headed out to sea after having called a muster, at which only one midshipman (Mr Duchatelet) and one sailor were missing.

The same day, at 2h00 in the afternoon, we were inspected by the English frigate *Proselyte*, 26 guns (12 pounders). Our Commander went aboard and the English captain made a return visit shortly after. He was impressed by the ship's internal fit out, was presented with one of the medals struck for (2) our expedition and given some fresh vegetables, and then left.

The Lizard was sighted from the masthead at 1h00 in the afternoon of the 30th [Vendémiaire, 22 October 1800], bearing NNE. No notable events occurred while we were in the Channel. A swell ran for two days, requiring frequent tightening of the shrouds, and we had 36 hours of contrary winds. We sighted many ships, but none closed to inspect us.

On 9 Brumaire [31 October 1800], we sighted an English cutter which kept us under observation for about 24 hours, without daring to come alongside.

At noon on the 10th [Brumaire, 1 November 1800] we sighted Gran Canaria, and then Tenerife at 2h00, and on the 11th [Brumaire, 2 November 1800] we dropped anchor at 10h00 in the morning in 22 fathoms water, over a bottom of muddy grey sand, off the town of Santa Cruz. This side of the island is exceptionally elevated, and Naga Point, which we rounded as we entered the outer harbour, is an extraordinary sight. There are rocks of prodigious height, piled one on the other in random fashion. At daybreak we were about 4-5 miles from land and the sun's rays, illuminating some rocks while others remained in shadow, made an enchanting spectacle for those to whom it was new. What they saw made them very hopeful, and they waited impatiently for daylight to reveal further details of these elegantly distributed rocky masses. Soon, however, the illusion was destroyed: as the (3) sun advanced over the horizon we discovered how arid the rocks were, how they seem to have been piled there simply by enormous jolts in the earth's crust, and how vividly they evoke the terrible effects of the volcanoes that spat them out. No sooner had we arrived in the outer harbour than local boatmen visited us with offerings of very large grapes, which we found green and insipid, plantain bananas, which on first bite seemed to us tasteless and doughy, and also oranges that were as green and acidic as lemons. My first reaction was to ask whether these were the much-vaunted "golden apples," but after several days the oranges ripened, and since then we have eaten them with great pleasure. We grew accustomed to the plantain bananas, which we found good and we were subsequently very happy that we had taken several bunches on board. We gradually became familiar with the country, and it must be admitted that it would be wrong to judge the island unfavourably based on the way it looks at Naga Point, or to refuse to acknowledge, given

[1] Page numbers, given in parentheses, are those of the original manuscript. All footnotes in this translation are by the translator unless otherwise indicated.

the beauty of their sites and the richness and fertility of their soil, that these are the islands so favoured by our ancestors.

The town of Santa Cruz is built near the sea, in the only canyon in this part of this island. It is very small, with (4) fine streets and spacious though poorly sited houses. Their facades lack symmetry or taste, their windows overhang the street, and the roofs are terraces.

The Santa Cruz harbour is an open one, and unsafe when the wind is from the [blank]. There is no port, and a jetty about a hundred *"toises"*[2] long, fitted with a crane, is used for unloading goods arriving by sea. Ships cannot come alongside, so everything is done using port longboats, which is very inconvenient because there is often such a swell running at the landing that the boats cannot come alongside. The ships are also watered from this jetty, with the water being carried through underground conduits from the town and siphoned into casks using a hose. I was told that a frigate had once been built in Santa Cruz. I was unable to obtain any details about its construction, which must have been difficult on a coast where the sea is often rough and which provides no shelter whatsoever. We found no naval force there, apart from some small boats rigged to carry a gun on the open deck. They were beached and hauled high up on the shore. The coastal batteries seemed to us substantial and in good repair. A stopover in this harbour is fatal for seamen, and will remain so until the English practice of allowing no seaman to set foot ashore is introduced into our ships. Venereal and skin diseases (5) are endemic to the country, and the latter are even considered by the local people to help ward off greater illnesses, so they refuse to be treated for them. However, men who are discriminating in their choices have nothing to fear from seductive charms in this beautiful country. In addition to what I have just mentioned about them, lower-class women have a yellow and livid complexion, faded features even in youth, and wear disgusting clothes. Those of a different class dress almost in the French manner within their own houses – I say "almost" because it is done in a tasteless way – but they would not dare appear in the street in such outfits. As soon as they venture outdoors they feel the need to put on a black skirt and a cloak of the same colour. When they arrive at a gathering they immediately remove both and appear dressed in white, already somewhat dirty and very crumpled (as one might expect) by this second garment, which they have put on and taken off several times. I can say nothing about their character or the excellence of their wit. They seemed to me to be lazy, as are the men of their nation. However, they admire the lightness of our character, and we had no difficulty convincing them that no nation provides better husbands or lovers than France. As for the charms of their physiognomy, the most beautiful among them would pass for ugly in France because of their brown complexion and absolute lack of colour. However, they have large, bright eyes, fine teeth and very black hair. I should note that as I have not visited the entire island I can only speak for Santa Cruz and its surroundings.

We were generally well received (6) during this stopover. It was not that we were specially treated or feted, since displays of interest are not the same here as in France, but we recognised such signs among those with whom we had dealings. Some 8-10 curious or learned persons came to visit us almost every day. They encouraged us to visit their homes, and did their best to welcome those who could do so. Their meals are luxurious only as concerns the quantity of dishes served and the gold and silver flatware: I found their cuisine dreadful in the highest degree.

The only water in the town comes from the mountains. It is carried along wooden troughs over

[2] The "*toise*" was an old French measurement of length (1 *toise* = approx. 1.9m).

a distance of some three leagues, and in order to provide a uniform slope for these conduits it has been necessary for them to run alongside rocks and mountains. In some places they are supported over thirty feet in the air by poles, which are set apart at the base and brought together at the apex in a small crosspiece the width of the trough (10-12 inches). This arrangement seems very precarious; a malicious person could topple the conduit and deprive the town of water, and it would be no more difficult for an enemy to destroy them by cannon fire from the harbour.

The town's surroundings provide a reasonably large number of picturesque views, as is to be expected in a country where one cannot walk ten paces without going up or down. One of the most striking I visited is a ravine where mountain rainwater forms a cascade some fifty feet high between two towering rocks approximately one hundred feet high, and from there tumbles on to enormous rocks (7) and lava flows and then out to sea, passing through the town on the way. The ravine was dry when I visited it. Everything about this precipice – from the aridity of the dry riverbed, which made walking difficult, to the absolute silence around me, broken only by the cries of birds of prey, the vast height of these rocky mountains in between which only a small patch of sky was visible, and finally the enormous overhanging rocks that seemed about to fall away and crush me beneath their boulders - evoked chaos and the frightening effects wrought by Nature. I was disturbed in a way difficult to describe, and thought to myself: "is there not a risk, as we travel the globe in search of Nature's most horrible and hidden secrets, that our temerity will be punished in the same manner as that of Briareus?" This spectacle had seemed truly beautiful to me, yet I felt relieved as I walked away.

That is about all that is notable within two leagues or more of Santa Cruz. The soil is extremely arid and virtually devoid of any vegetation apart from the sorry euphorbia that are seen everywhere in dried cracks in the rocks, and the agave and cactus oponcia (known commonly as prickly pear), whose fruit – a sort of fig covered in spines – seems to defy both human hands and seasonal uncertainties. But once one has crossed these mountain chains, which act as a barrier to the ocean, another climate is encountered, with different temperatures (8), fertile plains, cultivated valleys and hillsides covered with vines and peach, orange, fig and all kinds of other fruit trees.

Further on, the mountains present a different aspect and their lower slopes are covered with trees, including the following:

The laurus nobilis (bay tree), which can provide the navy with straight wood and framing timber. When young, it is used locally to make hoops, while at maturity it is used for staves, furniture, wheel rims, etc. This wood has the advantage of not warping, regardless of how green it is when used. It is excellent for making oars, which are superior to those made of ash.

The laurus indica, or Madera bay tree, which is used for the same purposes as the laurus nobilis; its fibres are less close-knit and it is used in particular for chairs and rifle stocks.

Tib, another species of bay tree, used like the laurus nobilis; it is particularly used locally to make mantelpieces, as it is claimed that it does not burn easily.

Foliado (viburnum) or thyme bay, a large shrub growing to 15-20 feet, with a thickness of 12-18 inches, producing a violet-coloured fruit. It is a variety of the species grown in France and is used for making lance shafts, rifle rods, mace handles, hoops, etc.

The chestnut tree, which is the same as in France and is used for the same purposes.

Visnea mocarena, which can give ample quantities of straight wood for naval use – except however for planking, for which it is too brittle.

Palo blanco, a type of olive tree which is used like the sorb, mountain ash, etc.

(9) Barbusano, which has a very hard wood and a foul smell. It is used for ship keels and in furniture.

Myrica aya, also known as Myristica, a large shrub growing to 12-20 feet, with at most a three foot circumference. Its wood is hard and flexible, and is used for stakes, trellises, rungs, [illegible] poles and ploughs.

Erica arborea, a large shrub growing 20-25 feet high, with a circumference of 3-4 feet. It gives a very hard wood used for block pins and in mill construction. It also produces the best charcoal.

Several species of Hilex, a hard and brittle wood growing 25-30 feet tall, with a circumference of 4-5 feet.

Globularia florida, a shrub growing to 15-20 feet, with a circumference of 3-4 inches. Its wood is hard and heavy, ligneous and with very compact fibres. Its sap contains a resinous gum that is secreted between the bark and the wood when the shrub is cut; it seems to be quite plentiful.

The Convolvulus Canariensis (Canary bindweed), a climbing, twisting plant that grows to 40-50 feet or more, with a thickness of 3-4 inches. I have seen examples up to 10 feet, but this is rare.

"Bois de Rose," a shrub so named for its sweet perfume; it grows to 4-5 feet in height, with a circumference of 6-9 inches. It is very hard, and is rare in Tenerife. It is said to be common on La Palma Island.

Further up in the mountains, several varieties of pine and fir trees, growing to prodigious heights and thickness, are evidence of another temperature. They produce large quantities of tar, especially on La Palma which is apparently covered with them. Some are used for masts while others, with a very dark core and dense fibres such as are found in oak, provide all the framework used in (10) house construction. On La Palma, they are used for building boats that are rigged as brigs and called "costeros" because they are used for fishing on the Barbary Coast. They cost between five and six thousand francs, and last a long time.

The last plant found towards the summit of the mountains is Retamar, a species of broom that produces white flowers. It is from this plant that bees extract the delicious honey produced in the Canary Islands. Every year in the flowering season the local people take their hives to the places where the Retamar grows. The island also produces a plant known locally as Lina-buena, which solves the problem of bitter honey discussed by Pliny. It flowers in a season when there are few other flowers available, so that bees produce two sorts of honey in the same year, one of them sweet and the other having a very strong bitter taste.

Finally, the mountain tops are arid, devoid of any vegetation, and provide an immense quarry

for the study of mineralogy.

There are no mines in Tenerife, but it has abundant supplies of sand containing iron particles, which suggests the presence of scorched ferruginous rocks - the magnetic needle indicates that this metal is present in the soil throughout the island. The island's hemp comes from Europe, as do its copper, iron, lead and all the other raw materials used in the navy. Neither is there any form of manufacturing in Tenerife, and consequently indolence is rife (11) and, inevitably, begging is widespread, theft is a habit and there is almost general demoralisation. The Spanish have transplanted their European casualness into this country, and derive no profit from a soil that is suitable for the production of any vegetable, where cold-climate plants grow in the shade of tropical trees and where plants from northern forests grow alongside the coconut palm and the banana tree. The more Nature has done to provide gifts of all kinds, the poorer and more indolent the people seem. Their only commerce is the wine trade, and even here they are to some extent deprived of its benefits, largely due to other nations' mercantile greed. Ships making [illegible] their cargoes in Madeira only take on half or sometimes a quarter of a load, which they top up in Orotava where the wine costs at most a third the price of Madeira wine – and then they sell it all as being of Madeira quality. Some years ago, charcoal bunkering was a reasonably large export business but today it has practically disappeared, for no apparent reason other than local apathy. It is to be feared that the trade in tar from La Palma will one day go the same way. Each island supplies a certain number of goods to the others, but only for local consumption. In addition to those already mentioned, Tenerife's products include a variety of euphorbia, used for making corks.

The country has little to offer by way of fauna. There are many falcons, identical to our own, a particular species of (12) wood pigeon, although their numbers are small, many rock doves inhabiting the rocky outcrops and difficult to reach, plus varieties of our wagtails, chaffinches and canaries. I shot a heron, which was little different from those in France. Transportation is by mule, donkey and camel. There are no roads suitable for carriages, very few horses and some bullocks.

There have been no indigenous people on the island of Tenerife for over 200 years, but every day grottoes are discovered among the rocks, where these people placed their dead. It is not known what methods were used for preventing decomposition, but perfectly preserved specimens are often found, and the mummies have no incisions – the desiccated intestines are inside the corpses, which are simply wrapped inside double goat skins, sewn up with straps. I presume they were dried out in ovens. The Guanches have become very popular with the expedition, with everyone wanting a part - arms, heads or legs - and we have made a precious collection of these corpses which the Spanish use to fertilise their fields (<u>they had been heretics</u>).

A botanical garden was recently established in Tenerife, situated in a rich valley on the NW coast of the island near the port of Orotava. Abundant water is provided through canals, and already 200 rare plants from Botany Bay, Madagascar, Ile-de-France, China, the Cape of Good Hope and America adorn this garden and have provided flowers and seeds. This establishment (13) was a happy idea, which can be attributed to the Marquis de Villa Nueva. The Linneus method has been adopted and the division into 24 classes has been strictly followed, as the garden is mainly designed to acclimatise plants so they can subsequently be transferred to different temperatures. Any classification seems acceptable as long as it is followed exactly, and no doubt one day Tenerife will become a meeting place for learned botanists from every nation, coming to admire what has been provided in a setting where Nature seems even to have surprised itself in the blessings it has bestowed on the vegetable world, all brought together by

the hand of man in the best climate under the sun.

After 1706, when a volcanic eruption devastated the entire Garachico area, people had thought they were rid of this terrifying scourge forever, but on 21 Prairial, Year 6 [9 June 1798] a new volcano erupted on Mount Chajora, some 3 leagues south-west of the summit. Thirteen different mouths spewed out lava, terrifying the local inhabitants. The explosion was violent, but short-lived and now nothing remains of the Chajora volcano except enormous masses of lava, which at a distance of several leagues are testament to its destructive force.

I can say nothing of the celebrated peak, which we sighted from twenty leagues out to sea in foggy weather. Our short stopover in this harbour did not provide an opportunity for any of us to go to see it. We stayed in Tenerife for eleven days, during which time the Commander sorted through a collection (14) that he had left there during his first trip, and at 3h00 on the afternoon of the 22nd the few provisions we had been able to obtain were on board and we got under way.

In Tenerife harbour we had been forced to make some changes to the galley. Experience at sea during the crossing had not given the results we had expected, and tests ashore prior to departure, having been conducted in the open air, were not satisfactory. I noted on several occasions that, no matter how well alight the fire might be, it went out within five minutes as soon as the fireplace doors were closed. I attributed this to the fact that the air in the hold was not conducive to combustion and was insufficient to keep the fire alight. Moreover, when the doors were left open, nothing could induce the smoke to escape via the channels provided, because the external air coming to the stoves is both more combustible and generally heavier than the air in the gun deck. Thus one might assume that it would be drawn into the fire and force smoke out through the doors. This is indeed what happened, and since the difference between the specific weights of the two air masses increases when the gun deck gunports are closed, the internal air simultaneously contains less oxygen. These two causes reinforce each other, and smoke spreads through the gun deck and remains near the galley, making it impossible to stay there (15). Our cooks were so affected by this that they spat blood throughout two days of bad weather we experienced in the Channel. The smoke problem in Citizen Garreau's galley highlighted another one, namely the impossibility of using the stoves designed to fit outside the doors, and consequently we had no way of roasting or grilling meat – which is useful when the ship is at sea. A third disadvantage – even more basic and relating to daily usage – was the danger of fire. The galley is set flat on the deck and is fixed to it in such a way that air cannot circulate freely underneath. This was at the very least disturbing, even though the fireplace grills were separated from the deck by two sheets of iron, set three inches apart. Finally, a fourth defect related to the hold evacuation pipe, which allowed water from the deck to pass underneath the galley. The iron sheets rusted within a few days, and crates and sails that were in this part of the orlop were damaged. It was necessary to do away with the pipes and patch up the deck. Citizen Garreau's galley is a modified version of the "Kersaint" kitchen, and none of the new features is successful. In order to avoid leaving it ashore, we had in the first place to remove the still and replace it with a brick fireplace. This still, which at first sight seems to distinguish this kitchen from the Kersaint model (16), adds nothing in practice. All ships designed for long voyages have a still for distilling sea water. Citizen Garreau had the idea of dispensing with two of the boilers and replacing them with his still. That was feasible in lightly-crewed corvettes but, short of altering the galley dimensions of a fully-crewed warship, four fireplaces are certainly not enough for the officers and crew. Moreover, it is of little importance whether the still is part of the galley or not, because a separate fireplace always needs to be lit when it is to be used. We also widened the channels made to evacuate the smoke and made them connect more directly with the chimney. Similarly, we raised the galley so

water could be hosed underneath it. All of this brought us closer to Mr de Kersaint's system, but the changes did not stop us regretting that it had not been adopted in full. In his work on ship fit out, Mr de Missierry claims that Kersaint galleys, with the changes that have been made and recognised as positive (and this is always how they are presented to me) never smoke. I do not believe that this assertion is entirely accurate, but if it is then they are the best galleys possible and one should refrain from changing anything [illegible] about their construction. If they are not perfect, then it is by considering their defects in the light of the principles of chemistry and of experiments on air quality and mass in various parts of the ship that improvements can be hoped for. But if such research is left to persons unfamiliar with the navy, who cannot understand either the use to which things are put (17) or the circumstances and problems encountered in normal usage, then instead of moving towards perfection we will move away from it. This happened to Citizen Garreau, who made errors in relation to the principles of chemistry, since he thought that the oxygen in the fireplaces and that drawn in from the hold would be sufficient to maintain combustion – which experience has shown to be false. He also made practical errors in that his galley does not provide the required facilities; it is dangerous from a fire point of view and provides a conduit for water to enter the ship from the deck. I therefore believe that the idea of installing iron galleys on board ships should be entirely attributed to Mr de Kersaint, and that Citizen Garreau's modifications are unacceptable; useful changes cannot be made using his processes.

For naval vessels, the voyage from Tenerife to Ile-de-France was a ~~very~~ long one, lasting four months and [blank] days. No notable events occurred; we saw some ships, but did not approach them, and some seabirds such as petrels, albatrosses, frigate birds, gannets, etc. I shot three albatrosses, which were skinned and preserved. Fishing was unsuccessful, as we took only 3 or 4 sharks and a porpoise. We saw many flying fish, some sea bream and bonitoes, two devilfish and two pods of sperm whales. Fishing for (18) items of natural history was a lot more successful: we caught some 150 species of molluscs, shellfish, sea insects and small fish, which the Commander described and had illustrated in colour. Many are, or at least seem to be new varieties; he attaches great [~~illegible~~] value to this collection. We saw few natural phenomena, but during the night of 26-27 Brumaire [17-18 November 1800] the phosphorescence in the sea was extraordinary, illuminating the sails as if by reflected light, and during the night of 14-15 Nivôse we saw a lunar rainbow. I leave it to those responsible for meteorological observations to describe and discuss these rare natural events. On board, detailed observations were recorded on the state of the atmosphere, and we twice took sea water from a depth of 100 fathoms. On the first occasion the thermometer on the apparatus showed 20° when the water on the surface was at 24.2°. The difference was substantially greater on the second occasion, in the same direction.

The ship suffered no damage that calls for any special remarks. In Tenerife harbour we chafed both cables, as the clutter on the gun deck meant we were not as prompt getting under way as we should have been and the cable, being poorly secured, constantly slipped through the messenger, which itself often had to be tightened and checked. It is unfortunate that the navy has not brought into general usage the mechanical capstans (19) invented in France by Mr Forfait and in Holland by Mr [illegible].

On departure from Le Havre we had begun using the smaller of the two Smith filters we had brought with us. It produced perfectly clear and flavourless water for a month, but after that time the water became unpleasant and cloudy. This was because the muslin placed between the various layers had rotted and was letting sand through. This sand and charcoal, which

contained miscellaneous external matter left by the water, needed to be washed or changed. I have heard that Citizen Smith puts a type of hood in the filters he sells, made from a particularly water-resistant material. In ours he only included muslin, which rotted very quickly. We dismounted the small filter, changed the muslin (hardly any of which remained) and washed the sand and charcoal as best we could (not very well, however, as we did not have a large supply of water). It worked for a few days, but the water it produced was soon foul again. When we brought the large filter into service it worked for a similar period and then had the same problem. Nevertheless, the invention of this method of purifying water seems to me all the more precious in that it is simple. All that would be required would be to substitute a longer-lasting fabric for the muslin, to provide spares and to carry a supply of charcoal and sand, whose only preparation need be that of being well washed. The filter body is a sort of multi-bottomed cask, which could equally well be made anywhere, including on board, and one could even give it a more (20) convenient shape for use at sea.

On 21 Frimaire, Year 9, at 8h00 in the evening, we crossed the line at longitude 25°W. We were often becalmed in the tropics, and had a lot of rain. The humidity on board was extraordinary and began to trouble everyone, while the air inside the ship was by then very unhealthy. It is essential that no effort be spared to ensure that outside air can circulate inside a ship. One day, a seaman fell unconscious in the officer's supply store-room, and the gunroom was uninhabitable at times when we were obliged to keep the gun ports closed. Citizen Peron has made detailed observations on the nature and wholesomeness of air in various parts of the ship, and his conclusions will enable changes to be made to internal fit out and stowage arrangements to remedy - as far as possible - this serious disadvantage. I propose to develop, elsewhere, a means of ensuring that ships have air flow arrangements built in right from the construction phase, ensuring that the air supply is constantly renewed in all parts of the vessel. Bilge water fouling is another cause of unhealthy air. The way to overcome this is to renew the bilge water frequently, but hosing in water from the head pump means that the ship is constantly wet. This is why I prefer bilge cocks, and I regret that the *Géographe* does not have any. On another issue, the seamen in the forecastle were (21) constantly wading through water, because the scupper-hole for sluicing water away from the head pump had been cut through the foremast frame or forecastle bulkhead, and the water travelled this way as it passed through to the walkways. This is a problem that must be avoided. The ship did not labour at all during the voyage, behaving well and without any harsh movements. Nothing needed to be done to the hull except recaulking, plus nailing some of the upper planking on the after-deck,[3] which is too wide and not properly secured, so that it had warped in the hot weather. The masts have shown no signs of strain, except and the ends. We needed to change the foretopmast, which had split near the fid. Holes had been cut in both sides of the heel, each of them above the level of the fid-hole, no doubt to facilitate passing the top-rope, but the small amount of timber between the fid and these sheave-holes failed. As the mast dropped, it struck[4] the sheaves and split. The spare mast had the same defect, and had to be secured with cleats. I had a new heel made for the damaged mast, shortening it by three feet and changing sides so that the split was no longer pointing the same way as the fid. I had both sheave-holes put in the same side at the rear of the mast, one at the base and the other high up on the heel, with the fid-hole between the two of them but to the fore of the mast. This combines solidity with the advantage of being able to pass the top-rope easily; (22) it passes through the upper sheave-hole when housing the mast, and when the mast is being hoisted there is no difficulty passing through the two sheave-holes, since the heel is situated below. I take this opportunity of noting that when a ship strains its masts at sea and needs to house its topmasts for a time, it is obliged in doing so to slacken the

[3] "Sus-ceinte" in the French text is unclear, but has been taken as a variation on "susain/susin".
[4] The French "a chucqué" is unclear, but has been taken to mean "a choqué."

shrouds so that the fid can be loosened and withdrawn by heaving on the top-rope. It is almost always at this point, when masts are not secure, that a violent jolt can topple them. This problem could be avoided if the fid was mounted in such a way that it could be withdrawn without the need to slacken the shrouds. All that would be required would be to drill the fid hole four inches higher, place two cleats at this level on the trestle-trees to support the fid, then place a false fid supported by gammoning at the base of the heel. When the foremasts are to be housed, a top-rope would first be passed, then the carpenter would spilt the cleats and remove them; the mast would be supported by the false fid while the actual fid, thereby freed up, is removed. Then the false fid would be removed by cutting the gammoning and the mast could be housed without the need to slacken the shrouds. This manoeuvre would save time since there would be no need to heave the capstan to ease the mast, and there would be no risk of seeing the masts topple if the ship pitched or rolled violently. The topmast sheaves are made of gaiac wood; this is miserliness, all the greater in that we have no spares and that the gaiac currently available in French ports is most often of poor quality. The sheaves should desirably be (23) made of bronze like those used in the cat-tackle, top-ropes and even the halyard pulleys. Overall, this aspect of the ship's fittings has been far too neglected; chafing is considerable and frequent almost everywhere, yet in a number of cases it could be reduced simply by changing the position of some pulleys, chess tree holes, chocks or swivel-blocks. It is my intention to study these details elsewhere and to look for ways of simplifying this machinery. The mizzen topmast fid, which failed several times during the crossing until it was replaced by one of the spare topmast fids, convinced me of the need to have this fid made of iron, like the others. However it would need to be wide enough so that it does not split the mast and weaken it vertically. The standing jib boom failed, but this was at a knot, and it was replaced immediately. The main topgallant mast cap moved in the tenon. To fix this problem, the cap was pierced, wedges were inserted and another cap was added. This incident made me think that, in the first place, it would be preferable not to have the top as part of the cap itself, but rather a veneer added so that the masthead could be wedged if necessary, and secondly that the tenon would be better if it were rectangular rather than square, with greater dimensions fore-aft than starboard-port. This would make it more solid.

The sails often required repair, but none became unserviceable. The stores expenditure figures will show what has occurred in this regard – I have no relevant information. The rigging, well made and with very fine yarn, has not worn.

(24) In fitting out the *Géographe*, the weight of the small anchors has been pushed to the limit, while that of their cables has decreased. The sheet-cable has been reduced in girth by an inch, and we have embarked neither a sheet anchor nor its cable. I do not know the reason for these changes.

On 27 Pluviôse, some of the effects destined for the crew were found to have rotted away, and the remaining pieces had to be distributed. This incident leads me to speak about the crew's clothing, which is always poorly made and badly sewn from poor quality fabric that has been used so sparingly that the men are only half clothed. It is extremely rare for a seaman to be dressed in accordance with his size. This way of administering warships is entirely to the advantage of suppliers and to the detriment of crews, who are always badly dressed since the clothing they are given turns into rags within a week. Would it not be possible for the navy to have its own factories and material (the latter carrying distinctive signs so the seamen could not sell it on), and to dress each man according to his size? While admittedly this system would not make suppliers rich, the navy would derive a certain gloss from it, the men would be better off from being more properly kept, the officers would take some personal pride in the crew's

(and the ship's) turnout, and perhaps the taste for the navy life would increase in the country's ports. These comments on clothing apply equally to shoes: we should avoid giving crew members footwear made out of cardboard – many of our crew found themselves without any shoes after only three days.

(25) Another problem which also badly needs a solution is the fact that work in port is performed by men who know nothing about how things are done in practice, with the result that much has to be redone once the ship has sailed. For example, the General Supply store in Le Havre provided us with two series of flags that were out of all proportion – they had [illegible] the two series to make them into one. 250 lengths of muslin had been included, meaning that the hold is full of small pieces of cloth. Such wastage would not occur if things were done properly and in accordance with the relevant principles.

The *Géographe* sails best on a broad reach on a calm sea. It needs a little wind in those circumstances, but can outrun the *Naturaliste* even if the latter is sailing under topgallants, main staysail and studding sails. This advantage diminishes when a swell is running, but returns when the wind picks up.

On 26 Frimaire we began using the oscillometer, an instrument invented by the Commander of the expedition and consisting of a graduated half-circle set perpendicular to the horizon. The diameter is on top and the arc beneath. A pendulum is mounted in the centre, and since it always remains vertical it indicates the angle between the horizon and the masts as the ship oscillates. Two indicators, which the pendulum nudges as the instrument moves and which then remain stationary at the position where it has stopped, make it unnecessary to keep a constant watch on the instrument in order to know how far the ship is moving in one direction or the other. If the instrument is placed athwart the ship it shows the roll to leeward and windward, and if it is placed length-ways (26) it shows the pitch fore and aft. It is important to ensure that, when pointing to zero, the pendulum is perpendicular to the horizon. If that is not the case – because the deck is curved, for example – the difference must be taken into account and the observed angles adjusted accordingly. This instrument is used to indicate the size of the ship's submerged and emerged parts as movement occurs, and the duration of the oscillations. It will show normal inclinations and the extent to which they vary in different circumstances according to the height and range of the waves, wind strength, distance from the centre of gravity to the metacentre, etc. It will be possible to calculate fluid resistance and direction for the average duration of each inclination. Consequently, it offers from several points of view a means of advancing the still uncertain theory of fluids.

In the morning we sighted the Cape of Good Hope. After having rounded it we ran into contrary winds right up to our arrival in Ile-de-France on [blank]. We encountered one windstorm that lasted 48 hours and proved to us that the expedition's two ships leave nothing to be desired from the point of view of quality. The *Naturaliste*, especially, which constantly needed to make sail because it made less way than us, often astonished us by its stability. Notwithstanding this, the prejudice against this ship in Le Havre was such that many seamen would have forgone the expedition rather than sail in her because, it was claimed, she did not carry sail well. (27) Similarly, it had been predicted that the *Géographe's* masts would need to be shortened. We have done nothing of the sort, and up to now the ship has not laboured even in the heaviest seas. This goes to demonstrate that one cannot be too careful about making premature judgments, which are harmful both to the State and to the progress of the naval art.

Finally, on [blank] Germinal, after a crossing of 4 months and [blank] days from Tenerife, we dropped anchor in Tomb Bay in Ile-de-France. We would have entered the port had there been a pilot on board, but the fear aroused by our ships made the local authorities wary and it was only at dawn the next day that they decided to send us the pilot we had been requesting by means of regular rounds from the guns. Fortunately for us the night had been superb, because we had dropped anchor over rocks and very close to a reef. The calm had obliged us to drop anchor, after having stood off and on outside the port for half a day waiting for a pilot to take us in.

The colony's health authorities and administrators came on board to inspect us, and it was only after the health report had been prepared that we received permission to communicate with the shore. The administrators had a long conference with the Commander and collected all the mail we were carrying for the colony. Both of these precautions are equally necessary. One cannot take too much care (28) to guard against the introduction of smallpox, which has cruelly affected this country and which several years ago robbed it of a prodigious number of its people. Similarly, the arrival of letters introducing overly philanthropic ideas would lead to carnage and devastation in the colony, and from this point of view the inhabitants probably had as much to fear from the arrival of ships from France as from enemy vessels. We were able to allay all their fears by informing them of the First Consul's wise and generous views, and by assuring them that the Government treats French citizens in the colonies with as much interest as those in France itself. Accordingly, we were greeted as men who were bringing good news. Yet the *Aurore* had called a few months prior to us and, for reasons I am unaware of, the colony had not been happy with its stopover. For our part, it had become unnecessary to have introductory letters, since we encountered only compatriots and friends everywhere in the colony. This port call certainly made up for the fatigue endured during the crossing.

We did not find M de Cossigny in the colony, as he had been forced to leave on the very ship on which he had arrived. He had informed the Colonial Assembly of his instructions, which reportedly required him to pay salaries to the natives employed in the powder mill. This measure (29) seemed bound to lead to a general indigenous uprising and consequently to ruin and probably loss of life for all the inhabitants, so they sent Mr de Cossigny away - not with the intention of thwarting the Government's plans, but in order to remove him from certain peril. They were critical of ministers for having signed these instructions, but attributed them to Mr Lescalier. One might add that this colony has remained French, and in a fortunate if not brilliant state, largely using its own means. Each citizen is also a soldier, constantly prepared to take up arms to defend his country. His personal interests are so bound up with the general interest that he never loses sight of the latter. Well-conceived signals, known to everyone, inform people throughout the island of what is happening at any particular place and where they should assemble, so that if an enemy attacked he would always find a small army at the place he was threatening, ready to oppose him. This was how our own arrival was made known, and even before we had set foot ashore curiosity or public interest had led to a gathering of people from the interior at the port. From what I have just said one can understand that their shore signals were too well-established and active for the locals to adopt the ones we gave them, and since in addition their (30) signals are known to everyone and the slightest misunderstanding can give rise to concern or alarm, it is difficult to modify them. One might add that these arrangements had only recently been changed and had just begun functioning, that numerous very costly series of flags had been made, which in the absence of muslin were made from white and blue cloth, and that consequently the time was not right for proposing a new system. However, I believe that when people begin to realise that this system has consumed great quantities of stores and that they have taken on costly and continual maintenance by substituting

cloth for muslin, they will see advantage in the models we have brought by using signal-balls, which in addition to being economical have the great advantage of being suitable for both day and night signals.

We were not as fortunate in our dealings with the navy administration over requirements for the two ships. We were able to get nothing – absolutely nothing – from the port, so that in a French colony we were forced to turn to foreigners. It was the Danish Consul who supplied the expedition with everything he could, and without which I do not know if it would have been possible to continue the voyage. Thus the situation is that in Ile-de-France the navy is unable to resupply a corvette: what purpose, then, is served by its administration, which compares in size with that (31) in the port of Brest? And what do the two thousand state workers do every day? They certainly cannot be said to be employed on maintaining the port – the cleaning machines lie at the bottom of a dock in a state of absolute decay, and the port is full of the wrecks of sunken vessels.

I need to postpone until our return writing about the resources this country can offer to the navy. Time has not allowed me to research the questions of imports, the quality and quantity of raw materials or the standards of various skills useful to the navy. Several of our officers became ill and were hospitalised almost as soon as we arrived, so there were only two of us available for duty on board. I will only say that, from a naval point of view, the Government should focus its attention without delay on this precious colony.

We got under way at 6h00 on the morning of 5 Floréal, leaving behind 4 officers from the expedition, several midshipmen and about half of the naturalists. The Commander allocated duty on board and was good enough to give me responsibility for a watch. When we left France we were running four watches, but on departure from the colony we were at five, because Commander Le Bas[5] was given one and midshipman Bonnefoy another, while the Commander brought over another officer from the *Naturaliste*. We cleared Ile-de-France by the north and set (32) a course S-SSE, when the winds allowed, until we reached latitude 29°S. We then encountered variable winds that carried us to the coast of New Holland in 32 days, between latitudes 20°-39°S. The crossing was splendid, with almost constantly favourable and occasionally strong winds. There were no accidents or notable events. We sighted several seabirds, particularly albatrosses (which only left us when we neared land) and also cape pigeons. We did not take any fish or molluscs. We sighted the coast of New Holland at 7h30 in the morning on 7 Prairial [27 May 1801]. At noon we were at latitude 34°12′36"S and longitude 111°44'58"E. We skirted the coast from S to N, standing off about 6 miles. The weather was generally fine and we could explore the coast quite easily. Everywhere heavy surf pounded over the reefs lining the beach and the coast, rising to 60-120 *toises*, provided no opportunity for us to land. Soundings consistently revealed a bottom of rocks, madrepores or coral. We were therefore unable to satisfy the impatience felt by our researchers, who were all very keen to visit a land that we saw to be covered with immense forests. There had been feverish conjecture and heated discussion over the past two days, some claiming that this land was neither inhabited nor fit for human habitation because water nowhere ran into (33) the sea. Then on the 9th [29 May 1801], just after a discussion had concluded, we had proof that passionate imaginations should not be given unbridled rein. A large fire on the coast at sunset was a sure indication that men were present, and one of the lookouts claimed to have seen several fairly large animals coming and going in a wood, close to the shore.

[5] While Le Bas's name is not mentioned in the transcription, it is included here and elsewhere in the translation to avoid confusion with Baudin.

The next day, 10 Prairial [30 May 1801], we discovered an immense bay and stood in for it, with soundings consistently revealing an excellent bottom of sand mixed with soft mud. At 4h00 in the afternoon we dropped anchor at observed latitude 33°28'46" and longitude E [blank], approximately one and a half leagues from shore. A dinghy under Mr Freycinet's command, with Messrs Depuch and Riedlé aboard, was sent to reconnoitre the coast. They went ashore in a cove next to the anchorage and saw many footprints and excreta in the sand, left by an herbivorous, cloven-footed quadruped which they considered to be about the size of a goat. There was no sign of any inhabitants or of any fresh water. They saw some black herons, crows and small grey birds. Mr Depuch returned with several types of granite and slivers of iron, which he reported having seen in large quantities lying on the ground. Mr Riedlé brought back (34) specimens of the bushes that grow prolifically on the coast. The woods generally have slow-growing, poor vegetation. The few trees found near the coast grow to no more than 30 feet in height. One of them, which was quite common, produces large quantities of a sort of resin, of which the researchers brought back some samples. It is odorous, transparent, sticky, very friable and of a brownish-red colour. When applied hot it adheres strongly to objects – even metal – but to me it seemed a little dry.

What I have just said about coastal trees in this area should not be used to judge the interior. Onshore winds are normally full of atmospheric vapour, burning the coast where it initially makes landfall, but in my view the vegetation commonly found 100 *toises* inland (and sometimes even closer to the coast), where the soil is blackish and suitable for agriculture, augurs well for the continent. Admittedly this relates only to the place where the first landing was made, on what is a reasonably elevated coast in the south of the bay. In the rest of this immense bay all that could be seen were alluvium and a beach of white or black sand mixed with (35) mica, where dunes provided a barrier against the sea. They were covered with trees and bushes which, in several places, seemed to us to grow almost to the water's edge.

Another boat, under Mr Piquet's command, took the astronomer and geographer to determine the position of the bay's southern headland, but the coast was lined with reefs and proved unapproachable. Very strong currents prevented the boat from returning the same day and the researchers, made somewhat ill by a strong swell, spent the night at anchor, having achieved nothing. They returned to the ship the next day, very dissatisfied with their trip. It was in memory of this unpleasant night that the Commander christened this headland "Cape of Discontent." The cove where the landing occurred was named Granite Cove.

The Commander saw some natives while he was ashore on 15 Prairial, but was unable to communicate with them. He saw no sign of fresh water. However, having received a report from one of the *Naturaliste's* officers who had landed at another point and had seen a sort of river off in the distance, he decided to send a party to reconnoitre it the following day (16th). As the Commander had agreed that I could participate in this small expedition, I set off at 3h00 in the morning (36) in the longboat, commanded by Commander Le Bas, along with several of the *Geographe's* naturalists. Captain Hamelin, accompanied by two of his officers who had reconnoitred the location the previous day, guided us to the place in his dinghy. We arrived at dawn, landed without problem in very fine weather, and Mr Le Bas ordered the coxswain to drop anchor. A general rendezvous was set for 3h00 in the afternoon, at the same place, and we then separated. I set off into the bush with Messrs Riedlé, Lesueur and Barbe and we walked together, some way apart but not losing sight of each other, keenly searching for information on this part of New Holland that until now has been unknown to civilised nations. The vegetation could not be abundant in sand that until quite recent times had been under the sea,

and consequently virtually all we saw were bushes, apart from a tree whose hard, brittle wood, dry and twisted, accurately reflects the poor soil in which it grows. The only use to which the navy could put it would be as framing timber, and from this point of view it (37) often presents some very useful shapes. We also came across some examples of the resinous tree we had found to be plentiful in Granite Cove. In the bush we saw several birds, with rather plain plumage, which seemed to us to be unknown in our climate except for quails, which flew off in groups of 10-12, and also parakeets. The quails are different from ours only in that they are a darker shade of grey. The parakeets are green, with a red breast. We also shot a sort of small eagle and some crows.

We did not see any quadrupeds, but the presence of a large number of holes similar to rabbit burrows, though a lot smaller, suggests to my mind an animal the size of a rat, of a species unknown to us. Several of the researchers believe these holes to belong to land crabs, but when I prodded one with my rifle ramrod I flushed out an animal, which disappeared through another exit. Although I did not see it, the sound it made convinced me that it was a quadruped. We will be able to be certain of this if we come across others elsewhere, and may even be able to trap them in bags by smoking their burrows. While we were walking through the same bushland we came across three native huts. They were set 15-20 feet apart from each other, were of similar construction and in each case the entry faced north. The interior is (38) shaped like an ellipse segment, with a depth of about 4.5 feet and an opening of 30-33 inches. Small branches, set upright and coming together at a height of four feet provide the only framework for these dwellings. The frame is covered with either dried grass or the fine, flexible bark of a tree catalogued in Mr Riedlé's collection under N.° [blank]. Its suppleness makes it reminiscent of touchwood. Five or six feet in front of each hut can be found traces of fireplaces where shellfish have been cooked. In the cinders of one of them I found a boxfish, very dried out. After making our way through the bush near the sea we were separated from the alleged river only by a fairly extensive marsh almost entirely covered by samphire, with dry, hard stems about 15-18 inches high. There were also some rushes and reeds. Frequent pools of water made it difficult to approach the river, while seawater, which covers most of this area at high tide and leaves a slimy silt deposit, made walking difficult. However, I managed to reach the bank and walked along it for over a league, often with water up to calf-level. During this time I saw many marsh (39) birds, especially ducks, divers, teal, many black swans with pink beaks and feet, pelicans and herons. I frequently crossed small channels, several of which seemed to me to be man-made. These ones were narrower and allowed a flow of clear water. The path leading to them and the packed mud showing bare footprints suggested to me that this is where the natives come to fish. But what surprised me more was a sort of wall separating two quite deep pools of water. It was 8-10 feet long and about 12 inches wide at the top. Although roughly built, it provided me with a passage and without it I would have had to make a very long detour, or walk in water up to my waist, to get to the other side. I tasted the river water several times, finding it constantly brackish but less salty than seawater. If this is indeed only a marsh, then it is extensive enough for me not to have been able to make out its land-side bank. While I was following this alleged river, which was about 150 *toises* wide, I saw an immense forest of majestic trees on the other side. This made me want to head further inland, but in order to do so I would have had to leave my companions, which was not prudent. Moreover it was almost time to head for the rendezvous. (40) So we abandoned our studies and at about 2h30 we reached the shore. None of the researchers had yet returned. Mr Péron arrived alone, half an hour later, and I was astonished to see our longboat under sail and far off downwind. Mr Le Bas, having discovered the river mouth, had sent an order to the coxswain to anchor there. However, the crew had been sent ashore and only two men remained on board. They got under way, but since the provisions safe had not been locked and the stores – more especially the

liquor – were freely available to them, they drank too much, missed the river entrance and got themselves embayed downwind. For our part, we were worn out with fatigue and hunger. Fortunately we found Mr Saint Cricq and his dinghy, with several naturalists on board. He shared what little he had left with us, and prepared to get under way. Just as the dinghy was about to push off we noticed two natives in the distance, coming towards us and armed only with walking sticks. They stopped when they saw us. Mr Saint Cricq walked towards them along the shore and I went around behind the dunes to cut off their escape. In spite of this, one of them fled and we lost sight of him in the bushes. When we got close to the other one, we discovered a woman (41) paralysed by fear, face-down in the sand in a position reminiscent of a supplicant, but at the same time most unusual - I cannot describe it better than as being like a frog on the edge of a pond. Her arms, legs and thighs were folded under her, but a little to the side so they did not prevent her head and entire upper body from resting directly on the sand. I do not know if this position resulted only from fear, but I know that it would be impossible for us to assume it. We put our fingers in her mouth and ascertained that she had sharp teeth, but we were unable to study her closely since we were troubled by the state she appeared to be in. Tears had rolled from her eyes and we hastened to stop them by moving away, but not before having given her our gifts. I placed a small mirror and a knife in front of her, someone else gave her a bottle, etc. etc.

I was no more than 20 paces away when I saw our native woman raise her head and look at us. This gave me hope that she might become used to us, so I went back towards her. But this was in vain; she immediately let her head fall back on to the sand and pretended to have fainted. Two of the crew who, like me, had gone back on their tracks lifted her up and I noticed at that point that she was pregnant. This is probably what had prevented her from escaping. However, since she made no effort to remain standing, we placed her back down on the sand. This woman had a small, round face, with pronounced features that seemed to me similar to those found in Bengali women. Her skin was very black and she had fine hair – not frizzy but short and slightly wavy, exactly as if she had been given the Titus cut by the most renowned hair stylist. She was small in stature but well-built and her limbs, while thin, were well-proportioned. She had small feet and the skin on her hands was hard, forming a sort of scale. From the form of her breasts I judged that she had produced several children, even though she appeared to be no more than 20-22 years old. Her only clothing was a skin that seemed to me to be from a species of seal. It sat on her shoulders, suspended at the neck by two or three straps and with the fur facing inside. In addition to this sort of cloak, a piece of the same skin, sewn with straps and with the fur to the inside, formed a type of pouch. The inside bottom was lined with a piece of the fine bark which I mentioned earlier. It held tight to the bottom (43) of the pouch, so I believe it had been sewn in. We found several small onions in this pouch, similar to orchid roots and about the size of an acorn. As the woman continued to give no sign of life we left her, but we had hardly gone 30 paces before we saw her scamper off on hands and knees into the bushes, leaving behind both our presents and her stick. Several of our researchers also came across natives during their expedition. When first encountered they were unarmed and showed no concern, but when they saw that our people were walking towards them they uttered cries – seemingly rallying calls – and disappeared. They were followed by a dog which the researchers felt to be variety of shepherd dog, although they only saw it from a distance. It may not be impossible that this dog was similar to those encountered on the coast of New Zealand, near the Bay of Islands[6], and which have been compared to domestic foxes. However, there could be no mistaking the sound made, and the researchers affirm that these dogs bark exactly like ours. Soon afterwards, seven of these natives returned. They were aged between 20 and 30, and each

[6] The reference to "port des îles" is unclear, but may refer to the Bay of Islands, which Marion du Fresne named Port Marion in 1772.

was armed with two spears and an axe. Our researchers retreated (44) to avoid being forced into confrontation. They threw presents towards the group, which were picked up. However, the natives seemed more pleased by a handkerchief and a red tobacco pouch carrying a drawing of a Negro on its upper part. They repeated easily and distinctly the words said to them, such as "friend," "yes," etc. However, when the word "pourra" was pronounced, the researchers thought they detected that it had a particular meaning in the native language. The natives all repeated it, and withdrew. Presents and tokens of friendship were unable give them confidence in our people, who for their part also perhaps lacked assurance, and there was thus no communication between the two sides. There is some disagreement over how to interpret this reception by the New Holland natives. Some claim that is was overtly hostile, whereas others believe that it was simply posturing by people who, though quite self-assured, remained on the defensive. The former school of thought draws on the fact that the natives shouted out loudly and brandished lances or spears. But has this not been observed in many native people, who do this whenever they meet? Shouting gives them a feeling of a strength that they do not actually possess when compared to us, either in terms of their physical size – they are small – or through arts, which they do not have. Based on the meeting with the natives, it was assessed that they obey leaders. I believe that this idea should not be taken too far, but I do believe they are united by clan or by family. The native who seemed to be the leader of those our researchers had the opportunity of observing bore no distinguishing mark other than a small skin belt, from which hung a triangular piece hiding his manhood. I believe this to have been a form of ornamentation rather than the result of any sense of modesty, since the others were naked, as was the woman I had seen. Several of them wore cloaks over their shoulders, similar to the one worn by the woman mentioned earlier. However it is not known whether they also had a pouch. I believe it possible that this woman, being about to give birth, had given thought to a method of carrying her child and I assume that the sort of hood attached to her cloak was designed for this use. These natives are black, and of medium height. We did not see tattoos on any of them, but, the leader seemed to have his hair reddened with ochre. As for the woman I saw, she had none of the ornamentation that disfigures most natives in the South Seas. Their hair is short but smooth, their eyes (46) small and bright and their limbs are thin. Their dwellings are huts made from branches and are far less well constructed than many birds' nests – it is hard to discern in them the dwellings of thinking persons. Nevertheless, it is true that the Hottentots, who have already passed through the first stage of civilisation, live in similarly shaped huts, different only in that they are covered with clods of earth and that the entrance is covered by a skin. The three huts I came across within the space of about three leagues have not provided me with a great idea of the population. But it must be said that the coast on which we landed is perhaps the most barren in the continent, and yet in the marshland I came across several well-worn paths. Moreover the woman I mentioned earlier, although still very young, had already given birth several times. It is probable that these people reach puberty at an early age. Judging by the hard skin on the woman's hands, one might suppose that women are forced into arduous work which, I believe, would consist of digging the ground with their bare hands in search of roots which, in addition to some shellfish probably gathered on the shore and to fish (47) which the men catch (perhaps using a sort of wicker basket) in the marsh channels, is enough to sustain these wretched people's meagre existence. I do not know whether they are hunters, but all the birds I saw – especially in the marshlands – seemed to be wild. The concept of property must be limited if not entirely foreign to them, since they possess nothing. They are not familiar with navigation, or at least we did not see a single canoe on the entire coast, and I saw no trace of any of those arts whose discovery has multiplied our pleasures while increasing our needs. In fact, I do not believe that any of these natives is capable of greater sentiment than any other, for it is difficult to imagine a woman with any sensitivity lacking the curiosity to look at the presents we offered, and especially not being flattered by the receipt of a mirror - in which I have no

doubt she saw herself. And assuming – as our researchers believe – that the native who accompanied her was a man, what is to be thought of the poise, courage and sensitivity of a man who abandons his woman to persons he does not know and of whom he is afraid, and who flees without making any effort to save her from looming peril? I confess that up to this point nothing leads me to believe (48) that men living close to nature have any particular virtues. Neither do I believe them to be bellicose, or that they are cannibals. They did not make the slightest move to attack us as a group, or to surprise us when we were alone, even though some of our researchers ventured by themselves – perhaps somewhat unwisely – into the interior of their country. One day, while collecting plants, two of our researchers passed quite close to them, changing direction slightly so as not to walk straight towards them. The natives, who saw them, did not deign to pay them any attention and did not even seem surprised.

However, I certainly do not claim to have any settled opinion on these inhabitants of the new part of the world. A meeting lasting a quarter of an hour – and perhaps a hostile meeting at that – does not provide sufficient basis for speculation that one can reasonably consider to be definitive. I should not pre-judge what the future will teach us. One would have a very inaccurate idea of France if one knew it only through the existence and customs of our fishermen living by the sea. The same distance that separates those fishermen from the exotic luxury of the capital perhaps separates the people living on the coast of New Holland from those living in the interior. Mr Péron (49) assures us that, inside a sort of circular bower surrounded by a grass area that could fit 20 people, he saw drawings resembling hieroglyphic characters, traced in the sand with rushes that had been placed in various shapes and set alight, so that the characters were inscribed in black, on white sand. I respect Mr Péron's assertions, but this sort of temple or public assembly ground and these hieroglyphs could lead to conclusions so far removed from what I have seen that I cannot help harbouring some doubts. I have resolved to be constantly wary of my imagination, which could lead me to mistake something that is no more than the fortuitous result of chance for the sort of marvellous phenomenon that one is naturally hoping for in this sort of expedition, and I apply the same caution in respect of others. Be that as it may, nature is being studied so closely by the learned men we have with us, and observant eyes are being trained so closely on each of its secrets, that I do not believe anything can escape their research.

But it is time to conclude this already overly lengthy digression and to resume the narrative of our expedition. Towards evening we saw (50) Messrs Hamelin and Le Bas and their party coming towards us. The boats were still a long way downwind, and everyone was exhausted by fatigue, hunger and the cold. We lit a large fire, needing to resort to invention rather than normal methods to do so. We concocted a sort of flare by moistening powder, then used it to light some paper which burst into flame when we blew on it. Dry twigs did the rest. Mr Hamelin's dinghy arrived as were seated around this fire, preparing to eat some crows and oyster-catchers we had shot while waiting for the longboat to bring us some biscuit and water. The longboat had been left behind, and after half an hour we became impatient and returned to the shore to ask the dinghy crew how far away it might be. We learned that it had touched bottom, which was probably why it was late. On hearing this we hurried to the spot where we thought it might be, and after more than an hour's walk we found the crew drying itself around a large fire, with the longboat grounded and lying submerged and athwart the sea. The surf was crashing over it and had already almost completely filled it with (51) sand. On return from his foray, Commander Le Bas had come across three of the crew and had ordered them to return to the longboat and to beach it so the party could be taken on board. The coxswain succeeded in dropping his grapnel, but the current and waves prevented him from coming head-on to the beach. He came in athwart the sea, and the longboat was sunk before the party could get on

board. This would not have happened if the coxswain had taken precautions and not been relied on, given the height of the surf, and consequently if everyone had gone out to meet the longboat. However, the damage was done and we needed to think about ways of repairing it. The first priority was to dismast the boat. The vessel's aft was slightly further inshore than the fore. In the hope that the waves might swing it even further if they could get hold of it sufficiently and consequently that they might make it easier to haul in onshore, we decided not to cut the cable. Nothing could be saved; our biscuit, powder and coats were ashore, but everything was saturated by seawater. We were unable to do anything on our own: an effort of over thirty *milliers*[7] was required to haul the longboat onshore, and we were just 19 men, without a block and tackle or any scrap of rope. Mr Hamelin set off immediately, (52) promising help at dawn and leaving us his weapons and ammunition. We spent the night around the fire, but still chilled to the bone because we had no shelter or clothing, and waited for dawn to arrive. It came too slowly for us, but finally it arrived – but without any indication that help was intended or on the way. I began to fear that it would arrive too late, but the day passed without any further noticeable damage to the longboat. We obtained some water from a hole dug by natives about a league from where we were and containing the equivalent of about a water cask. It seemed to us that these people drink from these makeshift wells using a stick of celery. The water was brackish but we drank it and considered ourselves fortunate to have it. Our supplies, consisting of about ten pounds of bad, seawater-affected biscuit, a little rice and a piece of lard, were diminishing considerably. We needed to organise the rations. We did not have separate messes: everyone – officers and crew – stood around a small pot where the rice had been cooked along with some samphire to increase the quantity. We took turns in helping ourselves – some with their swords, others with a piece of broken plate, others with a piece of wood flattened into the shape of a spoon, and still others with a shell picked up on the shore.

(53) Towards the middle of the day I heard a gun fired from on board the ship, causing me some concern for Captain Hamelin. This was heightened when we discovered some oars, a handkerchief, a stocking, a bundle of tusks, etc on the beach, and recognised them as belonging to the *Naturaliste*. However, I concealed my fear because it would have been all too readily shared by everyone else, and it was essential not to weaken hope and courage among our comrades in misfortune. We set about sheltering ourselves from the ravages of the weather, setting up a tent using sails from the longboat. It was covered with branches and we spent the night there, with three of us constantly on guard duty. We were up before dawn on the 18th to observe the ship's movements, but there was nothing to suggest that our ordeal would soon be over. Some of the researchers set off for a place several leagues away to light a large fire as close to the ship as possible, and to fly a flag. At the camp we busied ourselves with clearing ground to guard against surprises from the natives, but I must say that nothing got done any more without considerable discussion. Disunity began to appear among the castaways, with some speaking of crossing New Holland to reach Port Jackson, others wanting to strike a treaty (54) of alliance with the natives, etc, etc, etc. We were camped on a narrow sandy strip of land, not more than 100 paces wide. Behind it there was a sort of seawater pond, over a league long and about 100 *toises* wide, full of fish. A single drag of the seine would have produced enough to feed the *Géographe's* entire crew for several days, but we lacked the means of catching anything. During all this time, the Commander was extremely concerned; Mr Hamelin only arrived alongside during the night of the 17th, after having spent twenty-six hours in his dinghy, exposed to all sorts of danger. At 3h00 in the morning of the 18th a dinghy had been despatched from the *Géographe*, but bad weather had immediately forced it to return alongside. We had been unable to sight it. At 10h00 the Commander decided to get under way, and brought the

[7] "Millier" = old French unit of weight: 1 millier ≈ half a tonne.

ship to anchor in the NNW, about two and a half leagues offshore. This manoeuvre reassured us somewhat. Finally, at noon a gun from the *Géographe* alerted us to a dinghy, which we saw leave the ship at the same time. It brought us a grapnel, a jack, two winding tackles, some biscuit and some arak. Mr Bonnefoy, who was in charge of the dinghy, came to anchor quite close to the longboat. There was rolling surf, and the wind was blowing onshore. Mr Le Bas hailed the dinghy and ordered it to make for the river mouth and to skirt the land he would find on the port side, which would take him to a spot (55)where landing would be easy. Mr Bonnefoy made his way to the river mouth. I went over to Mr Le Bas to ask whether he was sure there was sufficient passage for the dinghy, as I did not believe so. He decided to go there himself, overland. In light of the assurance he had received, Mr Bonnefoy entered this alleged channel, albeit cautiously, and found himself confronted by three enormous sandbars stretching right across, with the sea breaking violently over all of them. Convinced that he would have broken all his oars before reaching the first bar, he headed back out to sea. Had he gone further, the dinghy would certainly have been lost. He came back and dropped anchor about half a league downwind from the longboat. Our people took to the sea to fetch the material he was bringing. It all needed to be transported manually, making for a long and difficult operation and it was night before the work had been completed. Finally, however, we had all of the gear in place, and we put off fixing the swifter until the next day, hoping that the sea would be calmer. We spent the remainder of the night taking a much-needed rest. Our morale was in a good state, since we knew Mr Hamelin to be back on board his ship, but we did not have the same physical strength as before. At dawn we saw the dinghies from the two ships returning towards us. They anchored close to the longboat and the extra gear they had on board was unloaded. This work had (56) only just been completed when Mr Le Bas informed us of an order he had just received from the Commander to abandon the longboat and return to the ships. We immediately set about reloading the dinghies. It had initially been decided that they would make two trips, but Mr Le Bas changed his mind and we drew away from the coast at about 1h00, leaving behind the longboat and some of the material that had been brought to rescue it. The wind was strengthening and the sea was becoming rough. We had difficulty battling against the swell and the wind, and the dinghy was taking on water both fore and aft. However, towards 5h00 we came alongside, most of us without shoes and a number without trousers. We had needed to undress and to get into water up to our necks in order to reach the dinghy, and despite these precautions our clothes had been drenched. That is the end of the story of our shipwreck. Had we been a few hours later we would have been unable to return to the ship and would have been forced to return ashore or perhaps attempt a rescue on the high seas.

We had spent nine days in this bay, beating up during the day to inspect it. The boats, which had taken daily soundings up to several leagues around the ship, found the bottom sound everywhere, with good anchorages. Nights were spent at anchor. The winds were constantly ENE, variable to SSE. We often sighted a great (57) number of fires on the coast, especially at night. They were so large that they could not have been lit to satisfy any requirements the natives might have had, and it is almost certain that they had some connection with our appearance since we saw them whenever we approached the coast of New Holland. But it is difficult to be sure of their meaning. By providing evidence that the land is inhabited, the people were perhaps inviting us to visit - that, at least, would have been the case in civilised nations. However, the people of New Holland (who in spite of their name may be a very ancient people) proved, through their lack of enthusiasm in greeting us, that they had no intention whatsoever of encouraging us to visit. Perhaps the general custom of lighting fires should be seen as a declaration of war, especially if one considers the incident involving Mr Marion, who was attacked in Frederick Henry Bay as soon as he had lit a fire with a firebrand offered to him by the natives. He had imagined he was lighting a friendship fire, whereas the natives were holding

the firebrand of dissension. We are so dissatisfied with our inability to interpret these people's customs, ways and religion that we constantly look for signs of some sort of system. It may perhaps be that these fires, which are lit regularly every (59) night after sunset and in the middle of each day, are a means of paying homage to a divine being, and that if we sometimes witnessed fires of enormous size it was because these unfortunate inhabitants felt our presence to threaten some major disaster and were praying fervently to their supreme being to protect them from it. However, my opinion for the time being is that these people, whom I assume to be in the habit of lighting fires each night near their huts to ward off animals, use the same tactic to chase us away from their coast. For them, our ships are frightening and unknown monsters, and if in Europe we saw an enormous object descend from a planet one day, unlike anything seen before and seemingly alive, who knows whether we would not resort to lighting large fires everywhere to exhort it to return home? It might be objected that people who know about Europeans and their ships and who, consequently, are no longer afraid of the novelty of this spectacle, nevertheless also light large fires on the coast when vessels approach. My response to this would be that, in the first place, these people have no means of clearing a path through their dense forests other than by (59) setting fire to the bushes around the base of the forest trees, and that most of the fires we believe attributed to us have no cause other than this – and this must occur more frequently close to the sea, with people whose main food consists of shellfish. Secondly, in cases where the arrival of European ships actually did lead to many fires being lit along the coast, it seems only natural that people whose only offensive weapon is a spear should set about clearing land so as to avoid surprises and to defend themselves if attacked.

We threw out the seine as often as the weather would allow, and it did not take long to produce a haul of natural history novelties. We took a few fish using lines, mainly a variety of perch. We saw many dogfish, a considerable number of whales and some turtles. The albatrosses that had left us around Cape Leeuwin had been replaced by another species of bird that was quite similar in plumage and shape, but smaller, with a black beak and much less majestic in flight. We saw many of them in this bay.

Most of this bay consists of alluvial soil composed of white and black sand mixed (60) with mica. However, the bay's southern entrance – its highest part – contains older soil, since several types of granite were gathered there. It also has iron, which we found on the surface in reasonable quantity. But we saw no fresh water in any part of the bay, so it is superfluous to discuss the means and reasons one might have for establishing a maritime settlement there. However I believe we still do not have absolute certainty that there are no rivers or streams on this coast. It is true that we had seen no breaks along the entire coast, but given that we had missed one that was in fact the mouth of the brackish river we had explored (and this despite the fact that it was a lot closer to us than the far end of the bay), it is possible that others may have escaped our notice. The bay is immense, offering good anchorages but no shelter. It provides ample resources for completing the ship's firewood, and the immense and extensive forests extending deep into the bay and growing right up to the shore would provide precious timber for the navy. If water could be found in this area, it would be easier to exploit these resources. But since ships cannot come (61) close in, loading would need to be done using barges, and as it would be dangerous to remain at anchor on an unsheltered coast, it would be essential to create a port. I do not think this undertaking would be wise in an area that is subject to daily tidal action. I was unable to inspect the forests. Those among the researchers who ventured that far discovered several species of conifer which all produce a certain amount of resin, a hardwood tree that provides the natives with flexible bark, another that I came across everywhere close to the shore and that would supply curved timber, and finally a variety of

pandanus that produces large quantities of resin. The best-wooded area is deep in the bay, and no-one set foot ashore there. The climate is temperate and I believe it would be suitable for all types of plants grown in Europe. Among the plants our botanists gathered in the area were samphire, celery, a variety of thistle and a very beautiful white everlasting. We planted corn in several places.

The Commander named this bay (62) Geographe Bay and gave the name Granite Cove to the small bay where the first dinghy landed, Clumsy Cove to the place where the longboat was lost and Cape Discontent to the bay's southern headland, in memory of the bad night the astronomer and geographer had spent there, unable to set foot ashore or to fix their position.

A strong wind began to blow up on the evening of the 19th, and the barometer's slow and steady fall seemed to indicate that it would last for some time. No sooner were we back on board than we got under way and set a course to clear the bay. We had not yet rounded the southern entrance to the bay when the storm struck. The wind and currents carried us relentlessly towards the coast. The depth was decreasing on both sides and we were headed for destruction on Cape Discontent when the Commander decided to put on more sail than the weather really permitted. This manoeuvre hauled us off the coast, leaving us extremely satisfied with the ship's stability. The blow lasted 10 days, during which time we stood off and on in the same general area, (63) trying as best we could to fight against the strong currents driving us to the SE. There were some clear patches during which we manoeuvred to stand in for the land, but moments later the weather worsened again and we were forced out to sea. During the night of 20th-21st [9-10 June 1801] we lost sight of the *Naturaliste*, and on 30 Prairial [19 June 1801] the Commander abandoned any idea of returning to this bay, which had been an unhappy one for us; we had lost our longboat and some of the gear sent to rescue it; a man from the *Naturaliste* had drowned and we held grave fears for that ship itself, which we had not seen since the 20th. We headed north, towards Swan River. We remained out of sight of land for three days, since the weather was not favourable for exploring the coast and we had little hope of fine weather in this area, the season being too advanced. We had to skirt Rottnest Island, and had a good view of it. We doubled the Abrolhos Islands to the west, after which the weather cleared up and we were able to run down the coast to the south of Dirk Hartog Island. We coasted along the mainland and the island, (64) standing off at a distance of 10 or 12 miles. This is elevated country, reddish and steep, and there was no visible vegetation at all except for moss or very low-lying heather, which provide a tinge of green in places where the cliff tops do not simply end in plateaus. The ground above this vegetation is a talus, with quite regular striations presenting a strange and unique pattern.

On 8 Messidor Year 9 [27 June 1801] we sailed into Shark Bay through the channel to the north of the small Dorre Island, near which we dropped anchor. We went ashore to discover an island inhabited only by small kangaroos, plus some seabirds and eagles. The soil, which contains many secondary-era limestone rocks, is sandy and ill-suited to vegetation. We caught a remarkable quantity of fish, some of which the crew salted after having had their fill. We caught no less than 600-800 pounds each day.

The Commander went ashore with the intention of setting up his observatory, but as no fresh water was found he decided to proceed further into the bay. So we got under sail on the morning of the 11th [30 June 1801] and stood in for the northern coast of the bay. However, there was nowhere for us to land, so we spent the night at anchor (65) and on the morning of the 12th [1 July 1801] continued the search for a more suitable anchorage.

On the morning of the 14th [3 July 1801] we dropped anchor about 2 leagues off some land that we named Centre Island, where we intended to establish the observatory. Its fine grassy beaches and often steep coast presented an incomparably more agreeable aspect than the Dorre Islands. The dark red soil was interrupted in a number of places by white sand beaches. We hoisted out a dinghy to look for a landing place, but it could not land as the surf was pounding on to the beach and the onshore wind was freshening. The sea was rising and we needed to get under way. We had a lot of difficulty hauling off this coast, running very short tacks and missing stays several times in 6 fathoms water. Eventually, however, we got away and returned to our earlier anchorage on the most northerly of the Dorre Islands. (66) We remained there from 16-23 Messidor [5-12 July 1801], and then got under sail again after having fixed the island's position and completed our wood.

We continued tracking north, but the weather prevented us from going inshore. On the 29th we sighted islands at the NW tip of New Holland, which we took to be Dampier's Rosemary Islands.

At noon on 3 Thermidor [22 July 1801]we fixed the position of the NW headland. We had been obliged to beat up in order to return to it, because we had tracked too far north, which prevented us from sighting the Willem River and fixing its entrance. This location, together with the Swan River which we did not sight, are in my view two interesting places on which it is impossible for us to satisfy the Government's requirements.

(67) On the following days we coasted east along the northern coast of New Holland, but at a distance which only allowed us a glimpse of it from time to time.

On 8 Thermidor [27 July 1801] we dropped anchor 6 leagues off some land that we took to be an island. The Commander ordered me to reconnoitre and to check whether it was part of the mainland. I set a course S¼SW, taking constant soundings, and had 10 and 11 fathoms water up to 1 league offshore. I signalled suitable anchorages to the ship on several occasions, encouraging the Commander to stand further inshore. The soundings all showed a sandy bottom, except for one which returned soft black mud. Along the way I noted some low-lying land close to me, which we had not seen from the ship. It was a very flat island, which I skirted at less than a league's distance, before having 6 fathoms water right up to the shore. I entered a small cove where the sea was as calm as a pond, and ran ashore on a fine sandy beach. The tide was out by about 8-10 feet at the time, and I believed this to be the low water mark. However, I had only been ashore for about half an hour when my coxswain came to inform me that the tide was still receding and that the dinghy was about to be left high and dry. I went back down to the shore, to see rocks seemingly closing off the entry to the cove, and I preferred to await the evening tide before venturing there again. I assigned tasks to my crew, setting some to gathering shells while others looked for plants and bushes, and then I set off for the eastern part of the island. I soon came across two sources of fresh water, one of them quite large. The soil in the northern part of the island, where I had landed, consists of basalt prisms, some of them pentahedral in shape and piled one (69) on top of the other, mostly set on their angles. These blocks of lava, which are of fairly regular shape, seemed in some places to be made of massive building stones. Elsewhere I encountered large cobblestones which often protruded at an angle, making walking difficult and even dangerous. Some of the cobblestones I came across had recently been broken, but there was no indication that they had been moved or had cracked under some superior weight. The breaks were exactly what one would have

obtained when extracting a sample. They had the colour of the basalt, but without the decomposition, and therefore were different from the external surface which was covered with iron oxide, which gives this part of the island a reddish-brown colour. This type of rust, dislodged by rain and washed into the small valleys between the rocks, provides nourishment for the vegetation. In some areas it is mixed with a small quantity (70) of sand, no doubt brought in by the wind, and each of these deposits forms a small garden, displaying very pleasant greenery and exuding a sweet perfume. Plants and bushes grow between the rocks, and that is where I collected everything that seemed to me of botanical interest or, to put it more correctly, where I collected samples of all I had seen, which included mimosa, some leguminous plants, some *Solanum*, a very beautiful species of everlasting, etc, etc. So far as trees are concerned, I saw only a type of fig tree and a eucalyptus whose foliage was so sparse that its only use could be as firewood.

I came across a multitude of very large grasshoppers and even greater numbers of a small and very annoying type of fly, plus some white-flecked black butterflies and both large and small ants. A seaman sighted a snake as thick as a man's arm and at least five feet long, grey and covered in scales. Another seaman sighted (71) a large kangaroo. For my part, I discovered a kangaroo skull and saw another animal of a quite different type, although I was too far away to be able to provide an accurate description. It was about the size of our biggest dogs and was similar in appearance - I estimate that it stood about three feet tall. It was tawny in colour and trailed a long bushy tail. It was about three gunshot lengths from me, lying on rocks and because of its colour it was visible from a great distance. I walked towards it, but it ran off and I was unable to find it again. I shot two small birds, of the only species I encountered except for an eagle that I saw far in the distance, a crow identical to those in France, and many gulls. The seashore contains many shellfish of various species, but the enormous rocks, constantly washed by the tide, would protect them from enthusiastic collectors. Several persons, (72) armed with pliers and levers, would be required to get at them. I had some collected, and myself picked up as many as I could, including some serpula, nerites, mitres, strombs, rouleaux, oysters, etc. I climbed atop one of the highest outcrops in the eastern part of the island, from where I could see the mainland, which is separated from the island by a sound about 6-7 miles wide. I could see high peaks that I considered to be composed of exactly the same soil as where I was standing. It was low tide at the time and in the middle of the channel an almost-exposed sandbank was distinctly visible, but the colour of the sea on each side of it also suggested to me that deep-draught ships could pass through. I regretted that time did not allow me to circumnavigate the island in the dinghy so I could take soundings in the channels which, if navigable (as I assume), would make excellent anchorages. The low-lying sandy island to the north-east of the higher island, (73) separated by a channel 3-4 miles wide, seemed to me to be joined to the mainland by a bank that I did not see exposed, but where there are breakers when the tide is low. The sea rises about 25 feet on this coast. On 8 Thermidor high tide must have been at about noon, and high water mark on that day was some 4 feet below that of the highest tides.

My comments on the island's soil and general appearance only apply to the northern part, because in the north-east or thereabouts it appears as a green-tinged amphitheatre.

I left at 10h00 in the evening, under a clear sky and with a calm sea, but as soon as I had rounded the headlands I ran into rough water and strong winds. I maintained full sail for fear of falling off downwind from the ship, and very quickly we were soaked through and had (74) nothing further to fear from that side of things. After tracking for over four hours without sighting the ship, I feared we had missed it. I had a sounding taken and found 18 fathoms, which put me a

long way to seaward of the ship, which I had left at 10 fathoms. I changed tack and waited for daylight, under very easy sail. When the sun came up over the horizon I was at the spot where I had left the ship, so I was no longer in any doubt that it had got under way. We strained to catch sight of it in some corner of the horizon (which was not very wide at the time), but in vain, so I decided to return to the island we had just left and to wait until someone came to pick us up. We had no supplies left, but I was sure of finding water and an ample supply of oysters. My crew was not very happy with this development, but no-one complained. I tacked to the south-east because, to cap it all off, the wind had hauled around to the SSW and (75)was almost dead ahead for the course I wanted to make. But by standing in towards land to the south-east, I hoped to pick up a favourable wind to bring me back to the previous day's anchorage. We tracked in this direction until 9h00, when we sighted the ship downwind, at anchor and not far away. As can be imagined, I wasted no time in making for it, and at 10h30 we were alongside. The reason I had missed the ship was that after my departure the Commander had sent a dinghy to take soundings, and strong currents had pulled that boat eastward and the Commander had been required to get under way to retrieve it. I was close inshore at the time, and for some time had been unable to see the ship from my dinghy, so I had no way of knowing about this manoeuvre. The ship had sailed over two leagues eastward, which was enough for me to miss it at night, especially as I (76) had encountered the same currents and consequently had sailed close-hauled westward to compensate. We stayed on the same course over the following days, sighting land from time to time but always from quite a distance. On the morning of 17 Thermidor [5 August 1801] we sailed close to a sandbank that forced us to alter course NW, following which we found ourselves in 6 fathoms water, even though we could hardly see land. The depth varied constantly in this area, preventing us from standing in close to land and often forcing us to drop anchor at night. The bottom was generally sandy up to longitude 121°, and then we encountered soft mud. On the morning of 23 Thermidor we tried to make landfall on islands situated at latitude 14°48' and longitude 120°12', but the dinghy returned without having been able to find a landing place.

On the 24th and 25th [12 and 13 August 1801] we sighted several extensive reefs. Same course on the 26th [14 August 1801]. On the 27th [15 August 1801] we (77) found ourselves with the wind astern, in between two sandbanks. Fortunately there was no less than 11 fathoms water in the channel. On the morning of 1 Fructidor we set a course for Timor, and on the 2nd it was in sight. We dropped anchor in the Roti Strait on the 3rd. On the 4th we entered the Semau Strait under pilot and dropped anchor in Kupang Bay. I had been ill for several days prior to arriving in Kupang. Indeed the illness had been quite serious, but the land air – which is so fatal for many people – quickly cured me. On the 6th I disembarked, and on the 10th reported for duty again. I then began the construction of a longboat to replace the one we had lost. This work lasted throughout the stopover, because our workmen all fell sick one after the other. The Commander himself fell ill and we were not without concern for his life. He had only just recovered by the time we left.

We were reunited with (78) the *Naturaliste* during this stopover. It arrived on the 4th complementary day [21 September 1801], after 4 months and 12 days' separation. We had all been very worried, and this reunion caused much pleasure all round.